

P18663.A07

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Kazutoshi YASUNAGA et al.

Appl. No: 09/440,093

Filed: November 15, 1999

For: EXCITATION VECTOR GENERATOR, SPEECH CODER AND SPEECH
DECODER

Group Art Unit : 2700

Examiner:

TECH CENTER 2700

AUG - 7 2000

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, §1.97-1.98, and supplemental to the Information Disclosure Statement filed on April 26, 2000, Applicants hereby call the following documents, which were cited in a Supplemental European Search Report, mailed on June 5, 2000, in a corresponding EP Application, issued by the European Patent Office to the Examiner's attention:

(1) An article entitled "A Multi-Mode Variable Rate Speech Coder for CDMA Cellular Systems" by N. TANAKA et al., 1996 IEEE 46th Vehicular Technology Conference, Mobile Technology for the Human Race (Cat. No. 96CH 35894), April 28 to May 1, 1996, pages 198-202, vol. 1, was cited as a "Y" category document (i.e., a document that is of particular relevance if combined with another document of the same category) with respect to claim 50 of the European Application. The European Examiner indicated Figure 1 to be relevant;

(2) U.S. Patent No. 4,797,925 to L. DANIEL, entitled "Method for Coding Speech at

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Low Bit Rates”, which issued on January 10, 1989, was cited as an “A” category document (i.e., a document relevant to the technological background of the invention) with respect to claims 6, 18 and 60 of the European application. The European Examiner indicated the Abstract to be relevant;

(3) An article entitled “Analysis and Improvements of the Vector Quantization in Selp”, by W.B. KLEIJIN et al., 1988 Proceedings of the European Signal Processing Conference, pages 1043 to 1046, was cited as an “A” category document with respect to claims 6, 18 and 60 of the European application. The European Examiner indicated Paragraph 2: “The Adaptive Codebook” to be relevant;

(4) An article entitled “A Complexity Reduction Method for VSELP Coding Using Overlapped Sparse Basis Vectors” by S. J. KIM et al., 1994 Proceedings of the International Conference on Signal Processing Applications and Technology, October 18, 1994, was cited as a “X” category document (i.e., a document that is of particular relevance) with respect to claims 9, 21, 24, 36, 40, 63 and 64 of the European Application. The European Examiner also cited the document as a “Y” category document with respect to claim 50 of the European application;

(5) EP 488 751, assigned to Sharp KK, published June 3, 1992, was cited as an “A” category document with respect to claims 1, 12, 20, 37, 43, 57 and 62 of the European Application. The European Examiner indicated column 2, line 5 through line 11, column 2, line 30 through 34 and column 3, line 42 through column 5, line 18 as being relevant;

(6) U.S. Patent No. 5,428,561 to BRYANT et al., which issued on June 27, 1995, was cited as an “A” category document with respect to claims 1, 12, 20, 37, 43, 57 and 62 of the European application. The European Examiner indicated the Abstract, as well as column 3, line 62 through column 4, line 7 as being relevant; and

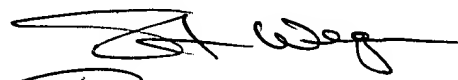
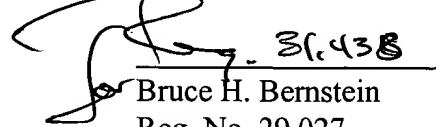
(7) EP 680 032, assigned to NIPPON ELECTRIC CO., published November 2, 1995, was cited as an "A" category document with respect to claims 6, 18 and 60 of the European application. The European Examiner indicated the Abstract as being relevant.

Along with a copy of the Supplemental European Search Report, copies of documents (1) to (3) are attached and are listed on a PTO-1449 Form, which is also attached hereto. Copies of documents (4) to (7) were previously submitted to the Examiner and thus, are not provided herein. The Examiner is respectfully requested to consider each listed document and to indicate such consideration by initialing the appropriate spaces on the attached PTO-1449 Form and to return a copy of the signed form to Applicants with the next official communication in the present application to confirm consideration of these documents.

In accordance with 37 C.F.R. 1.97(e), the undersigned certifies that each item of information contained in this Supplemental Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

If there are any questions, the Examiner may contact the undersigned at the below listed number.

Respectfully submitted,
K. YASUNAGA et al.



Reg. No. 29,027

July 28, 2000
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